

Amendments to the Specification

Please replace the paragraph beginning at page 3, line 11 of the specification with the following amended paragraph:

Figure 5 shows aligned amino acid sequences of the activation loop of different human kinases: **LRRK2 (SEQ ID NO:17)**, **LRRK1 (SEQ ID NO:18)**, **MATK (SEQ ID NO:19)**, **PDGFRA (SEQ ID NO:20)**, **MAP3K10 (SEQ ID NO:21)**, **DAPK1 (SEQ ID NO:22)**, and **BRAF (SEQ ID NO:23)**.

Please replace Table 1 at page 5 of the specification with the following amended table:

Table 1. Novel chromosome 12 STR markers

Marker name	Primer sequence	Physical position (bp) On chromosome 12	SEQ ID NO:
D12S2514	F: 5'-TTGCAGCTGTAAGGAATTGGG-3'	38873779	<u>3</u>
	R: 5'-GCATTCTTCAGCCTGAGACCC-3'		<u>4</u>
D12S2515	F: 5'-TGAAGGACACTGAACAAGATGG-3'	38974140	<u>5</u>
	R: 5'-GCCATAGTCCITCCATAGTTC-3'		<u>6</u>
D12S2516	F: 5'-CGCAGCGAGCATTGTACC-3'	38989214	<u>7</u>
	R: 5'-CTCGGAAAGTTCCAATTC-3'		<u>8</u>
D12S2518	F: 5'-CTGGTATTACCTCAACTGTGGCTC-3'	39034800	<u>9</u>
	R: 5'-ACTGGTATGTTAACGCTGGCAC-3'		<u>10</u>
D12S2519	F: 5'-AGCAGCAGAGAAGATTTCAATAAC-3'	39116816	<u>11</u>
	R: 5'-AATCATTTGAAAGAACCGAGG-3'		<u>12</u>
D12S2523	F: 5'-TAAACGAAGCTCCCTCACTGTAAAG-3'	39147728	<u>13</u>
	R: 5'-TCTTTGTAGCTGGGTTGTTTC-3'		<u>14</u>
D12S2517	F: 5'-TCATGAAGATGTCTGTGATAGGGC-3'	39282976	<u>15</u>
	R: 5'-CTCTATTGTGAGCAAATGCATGG-3'		<u>16</u>